

Walk away solutions for PCR analysis

Accelerate your daily lab routine



Standardization and harmonization of methods

- Reduction of errors and variability



Improved quality and performance

- Better reproducibility and repeatability
- Reduced contamination risk



Flexible

- Animal & plant DNA
- Bacterial DNA from enrichments
- Virus RNA

More information:



<https://r-bio.io/rt-pcr>

Real-time PCR workflow

Sample preparation



Food & feed samples, enriched bacteria cultures, virus samples

Semi-automated nucleic acid preparation



Only two DNA/RNA extraction kits

Three protocols:

- Animal & plant DNA
- Bacterial DNA
- Virus RNA/DNA



Device for medium throughput:

- Maelstrom™ Switch 8: 8/16 samples/run



Pre-installed programs

Real-time PCR set-up

Broad range of kits:



Allergen



GMO



Animal species identification



Microbiology

Multiplex kits

Real-time PCR run & data analysis

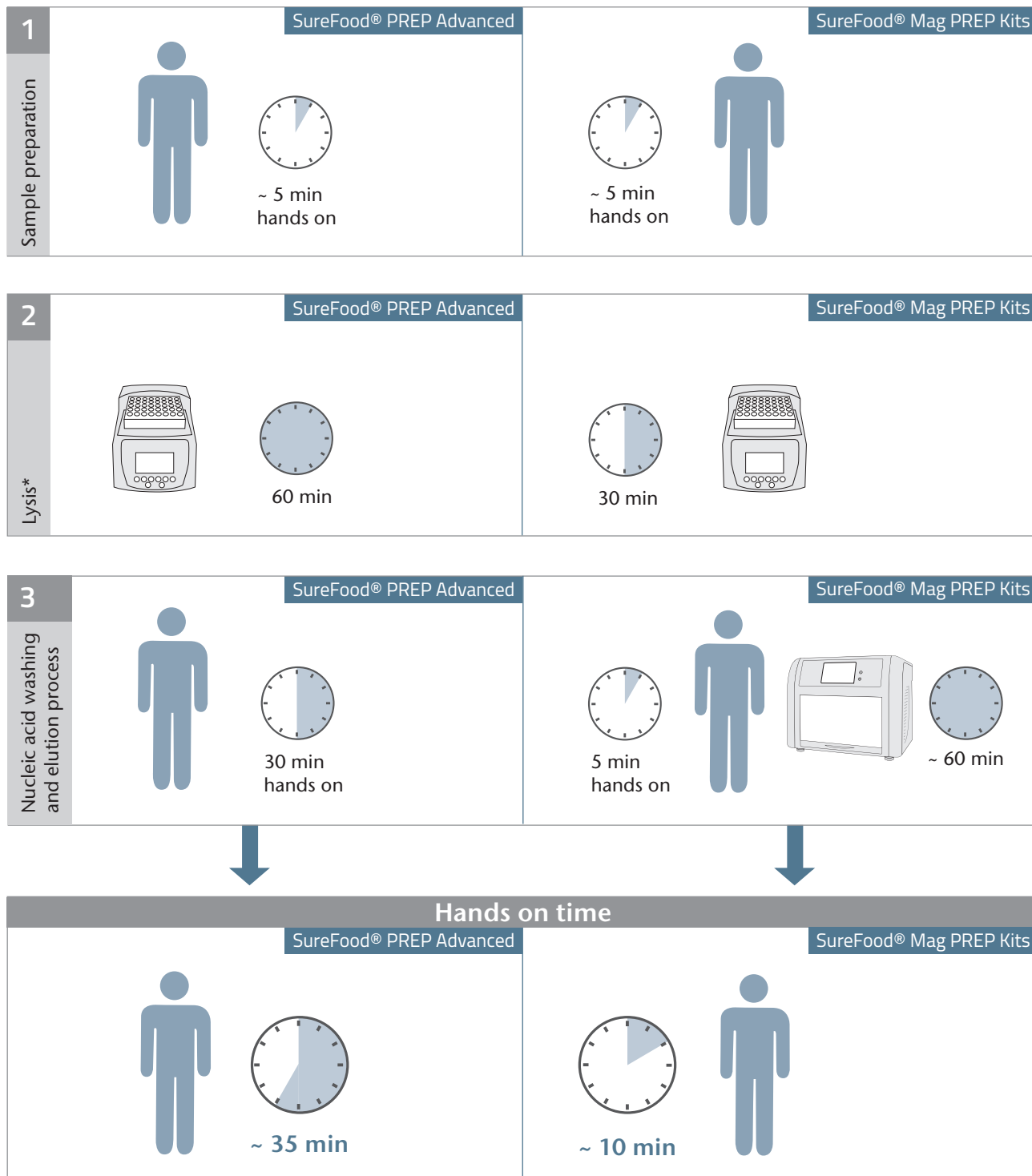


Pre-installed programs
Up to 16 samples/run

Reduce your handling time

Manual preparation using spin filters

Semi-automation



* When using SureFood® Mag PREP Pathogen, lysis is carried out directly in the TANBead device and takes ~25 minutes.

Semi-automated nucleic acid preparation

The instrument: The TANBead® Maelstrom™ Switch 8 offers a semi-automated, flexible and convenient nucleic acid extraction solution. The extraction technology based on magnetic beads is suitable for plant and animal DNA, bacterial DNA as well as viral DNA/RNA from raw and processed food and feed samples.



Flexible

Verified for many food matrices and the SureFood® & SureFast® qPCR kits



Operator convenience

Intuitive software interface & pre-installed protocols



Time saving

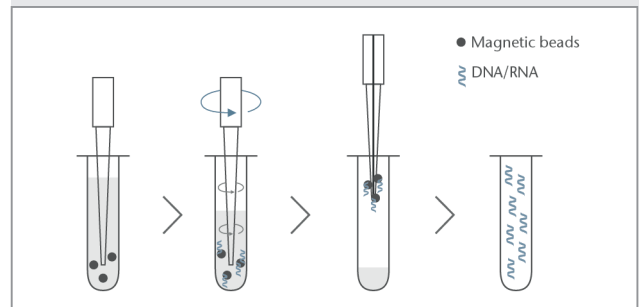
Pre-filled plates

Principle of nucleic acid extraction:

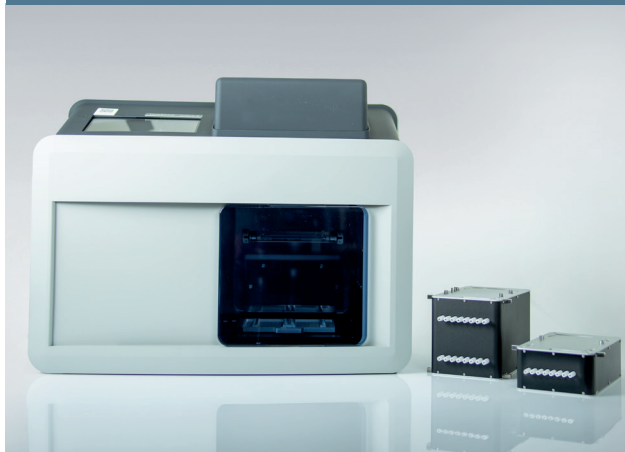
The nucleic acids adsorbed by the magnetic beads are transferred from well to well by magnetic rods for washing and elution.

Patented whirl stirring mixing technology:

- Spin tips stir magnetic beads at speeds up to 3000 rpm
- Effective prevention of aerosol cross contamination



TANBead Maelstrom™ Switch 8 (Art. No. ZSWITCH)



Specifications

- **Capacity:** Up to 16 samples per run
- **Weight:** 16.2 kg
- **Dimensions:** 524 (W) x 265 (D) x 412 (H) mm
- **Processing volume:** 50 - 1500 µL
- **Display:** 7" touch screen
- **UV lamp:** UV-C

The kits

SureFast® Mag PREP Food Kit (Art. No. F1060):

For DNA extraction of animal and plant DNA from food and feed as well as bacterial DNA from bacterial culture enrichments

SureFast® Mag PREP Pathogen Kit (Art. No. F1062):

For RNA/DNA extraction of virus samples as well as bacterial DNA from bacterial culture enrichments

Pre-installed protocols:

- Animal & plant DNA
- Bacterial DNA
- Virus RNA/DNA

Pre-filled plates for 96 preparations:

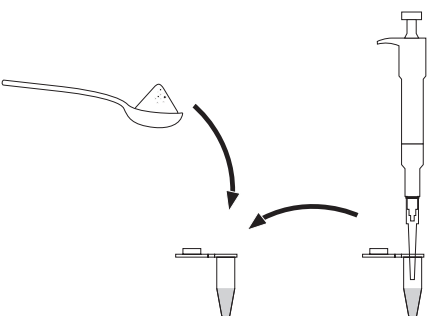
- 16 samples / plate

SureFast® Mag PREP Food, Art. No. F1060



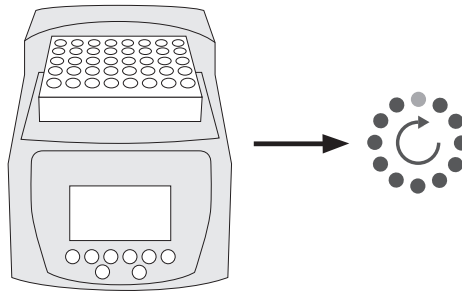
1

- Weigh of the sample into a tube
- Add Incubation Buffer
- Mix well



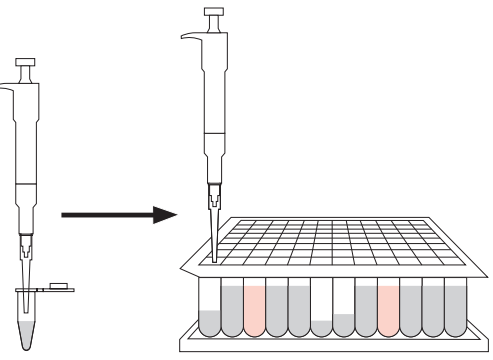
2

- Incubate with continuous shaking
- Centrifuge



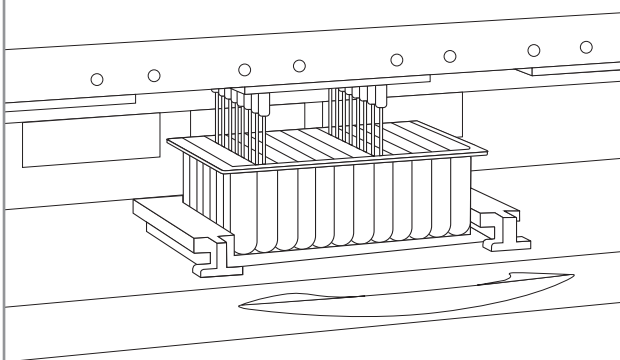
3

- Transfer the lysate into plate



4

- Place Auto Plate on the plate holder properly and walk away



Multiplex real-time PCR instrument – RIDA®CYCLER

qPCR cycler

User-friendly real-time PCR device using a patented magnetic induction technology to heat your samples and fan forced air for cooling. Verified for all SureFood® and SureFast® qPCR kits.



General			
Dimensions	13 x 15 x 15 cm (H x W x L)		
Weight	2.1 kg		
Optical			
Detectors	Photodiode per channel		
Excitation Sources	High power LED for each channel		
4 Channels	Green	Ex 465nm	Em 510nm
	Yellow	Ex 540nm	Em 570nm
	Orange	Ex 585nm	Em 618nm
	Red	Ex 635nm	Em 675nm
Performance			
Tube format	0.1 mL strips of four tubes and matching caps 48 samples per instrument		
Thermal performance	Temperature accuracy:	± 0.25 °C	
	Temperature uniformity:	± 0.05 °C	
	Ramp rates		
	Heating:	4 °C/s (fast mode)	
Cooling:	3 °C/s (fast mode)		

Calibration

No calibration required – RIDA®CYCLER is a non-contact system. The rotor is not in contact with anything physical just the induction field.

Computer minimum requirements

- Windows® 7, 32-bit Operating System (English version)
- NET Framework 4.5 or higher
- Intel i5 processor, 2.4 GHz
- 4 GB of RAM
- 1 GB free hard drive capacity
- Pointer device
- USB Drive
- Adobe® Reader® must be installed to be able to view reports in PDF format
- Bluetooth®, if this is the preferred connection

Features:



Versatility

4 optical channels



User-friendliness

Easy software set-up with pre-loaded thermoprofiles



Accuracy

High temperature accuracy & first class temperature uniformity due to magnetic induction



Size

Compact & portable qPCR instrument



Design

No extra centrifuge needed



Connectivity

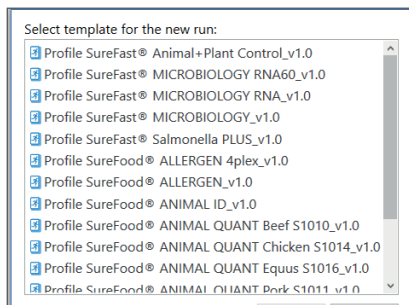
Operate several instruments

RIDA[®] CYCLER software

qPCR run

User-friendly software set up with all SureFast[®] and SureFood[®] assays pre-loaded.
Start the qPCR run in only 4 steps:

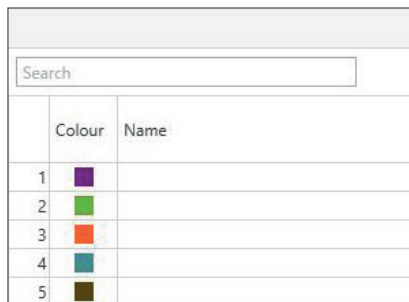
1 Select the template



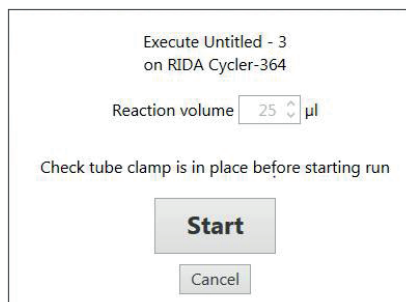
2 Select the assay(s)



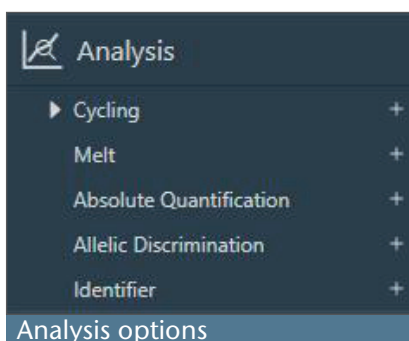
3 Enter samples names



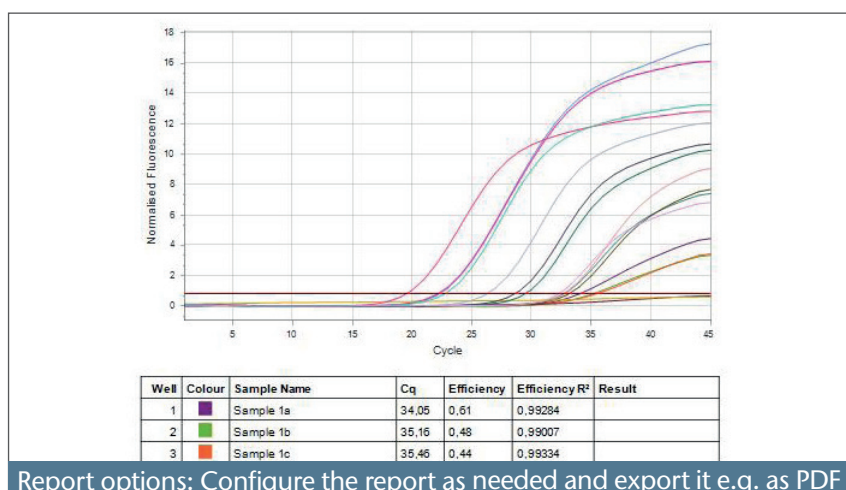
4 Start run



Analysis options



Clear result documentation



Report options: Configure the report as needed and export it e.g. as PDF

Walk away solutions for PCR analysis

Accelerate your daily lab routine

Changing to automation is easy

- Equipment is easily installed
- Pre-installed protocols
- Verified for SureFood® & SureFast® real-time PCR kits
- Technical support

Your way to automation

Product	Description	No. of tests/amount	Art. No.
DNA Preparation			
SureFast® Mag PREP Food	For DNA extraction of animal and plant DNA from food and feed as well as bacterial DNA from bacterial culture enrichments	96 preparations (6 plates/box)	F1060
SureFast® Mag PREP Pathogen	For DNA/RNA extraction of virus samples as well as bacterial DNA from bacterial culture enrichments	96 preparations (6 plates/box)	F1062
Automation system			
TANBead Maelstrom™ Switch 8	Automated nucleic acid extraction system for up to 16 samples/run	1 device	ZSWITCH
TANBead Maelstrom™ Switch 8 - 8 gearbox	Gearbox for 8 samples/run	1 adapter	ZSWITCH-CH8
TANBead Maelstrom™ Switch 8 - 16 gearbox	Gearbox for 16 samples/run	1 adapter	ZSWITCH-CH16
qPCR			
RIDA®CYCLER	qPCR thermocycler, incl. 1 box with reactions tubes	1	ZRCYCLER
RIDA®CYCLER-MIC-Tubes	Box with 960 reaction tubes and caps	1	ZRC-MIC-TUBES
RIDA®CYCLER TVS	Temperature verification system	1	ZRCYCLER-TVS